

Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

Meeting Agenda

Date: June 13, 2011 **Time:** _____ **Meeting Place:** BETHEL ADF&G

CALL TO ORDER: _____
Chairperson _____ Time _____

<u>ROLL CALL TO ESTABLISH QUORUM:</u>	<u>QUORUM MET? Yes / No</u>
Upriver Elder:	Processor:
Downriver Elder:	Member at Large:
Commercial Fisher:	Sport Fisher:
Lower River Subsistence:	Western Interior RAC:
Middle River Subsistence:	Y-K Delta RAC:
Upper River Subsistence:	ADF&G:
Headwaters Subsistence:	

INTRODUCTIONS:

INVOCATION:

APPROVAL OF AGENDA:

PEOPLE TO BE HEARD:

CONTINUING BUSINESS:

1. Subsistence Reports:
 - a. Lower River:
 - b. ONC Inseason Subsistence:
 - c. Middle River:
 - d. KNA Inseason Subsistence:
 - e. Upper River:
 - f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
 - a. Bethel Test fish
 - b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Area M Report:
7. Weather Forecast:
8. Recommendation: **ADF&G discuss Chinook salmon management actions**
9. Motion for Discussion and Action:
10. Meeting Action Announcement:

OLD BUSINESS:

- 1) Show the Chinook Conservation posters and update on their distribution

NEW BUSINESS:

- 1) ADF&G discuss new BTF graphs used in infopacket

COMMENTS FROM WORKING GROUP MEMBERS:

TIME, DATE AND PLACE OF NEXT MEETING:

Time: _____ Date: _____ Place: _____

ADJOURNMENT TIME: _____

Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

Information Packet

June 13, 2011

Kuskokwim River In-season Subsistence Catch Monitoring Report Orutsarmiut Native Council

June 06, 2011

***note:** A verbal report will be given at the meeting for the week ending June 12th, 2011.

Fishing for the week ending June 5, 2011.

Families Surveyed	Families Not Fishing	Using Driftnets	Using Setnets	Both	Gillnets More than 6" mesh	Gillnets 6" mesh or less	Both
36	25	3	7	1	9	1	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye		
Very Good	Normal	Poor	Very Good	Normal	Poor	Very Good	Normal	Poor
4	4	0	N/A	N/A	N/A	1	1	0

Does the salmon run appear to be running early, late, or normal?

Chinook			Chum			Sockeye		
Early	Normal	Late	Early	Normal	Late	Early	Normal	Late
4	4	0	N/A	N/A	N/A	2	0	0

Comments: This week the ONC inseason subsistence fishery technicians distributed a total of 20 ASL sampling kits. Most kits were distributed to the people who had sampled for the subsistence Chinook ASL program in previous years and a few kits were provided to new families that expressed interest in sampling this year.

36 families were surveyed this week for the In-season Subsistence Monitoring Program. 11 (31%) of the families interviewed were fishing this week. 25 (69%) of the families did not fish this week. 3 (27%) families reported using driftnets. 7 (63%) families reported using set nets. 1 (9%) families reported using both. 9 (82%) of the fishing families use gill net using 8 inch mesh, referred to as King gear. 1 (9%) of the families reported 6 inch mesh or less. 1 (9%) families reported using both.

25 (69%) of the families interviewed had not yet started fishing and said that they were just starting to get ready for the fishing season. Many families are just beginning fishing after fixing and cleaning their fish camps after the winter. Interviewees not fishing yet were getting their equipment ready and waiting for the fish run to increase. ONC technician's observations of fish activity on the river from the upper mouth of church slough down to Oscarville a total of 32 set nets, 31 drifters, and 6 whitefish nets.

Chinook: Of the 11 families fishing this week. 4 (36%) families this week reported the Chinook catch is very good, 4 (36%) families reported the catch as normal, no families reported as poor. 25 (69%) families that have not started their Chinook harvest are just finishing up their repairs on camps. Many of the nets that used to catch king salmon this year are

a lot larger mesh than previous years, due to the early run and high number of large kings that are coming into the river this year versus last year slow and small run.

Of the 11 (31%) families that reported fishing this week 4 (36%) families reported the run as early, 4 (36%) families reported the run timing as normal, no families reported the run to be late this year

Detailed feedback from the fishers on the health, timing, and abundance of the Chinook run were generally positive. Most who were catching fish felt that the run seemed to be healthy thus far, with much larger Chinook being caught earlier than last year.

One fisher reported a catching a Chinook estimated to be over 45 lbs, and expressed surprise how large some of his first catches were this early in the run. Another fisherman noted that the Chinook are coming in strong along with very large size sheefish.

Overall those catching fish felt the Chinook are coming in strong, healthy, and more abundant than the past few years. Some expressed that their catches seemed better catches than average overall and a few families even reported that they haven't seen a Chinook run this early since they were much younger. Other fishers expressed that the catch rates for this time were normal when compared to their many years of fishing on the Kuskokwim but were better when compared to the last few years.

Chum: Still too early in the season to assess the run. N/A indicates the question was not asked specially at this time, as it is too early to be relevant.

Sockeye: Of the fishermen interviewed only 2 had caught sockeye. These two families (18%) reported the run timing as early, viewing it as unusual to catch sockeye in their first efforts of fishing for Chinook. No families report the sockeye run timing as normal. No families reported the sockeye run to be late compared to previous years.

It is still too early for most fishers to comment on catch rates for the sockeye run, although one fisher (9%) interviewed felt his catch for this time-period was very good and 1 family (9%) reported their catches as normal. No families reported their sockeye catches as poor.

ONC Inseason Subsistence Surveys Current and Historic Catch Rate Information, 2011

Summary of Subsistence Salmon Information Collected by ONC Technicians.

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

Year	Week Ending	Number of Families			Chinook salmon			Chum salmon			Sockeye salmon		
		Inter-viewed	Fishing	Not Fishing	Very Good	Normal	Poor	Very Good	Normal	Poor	Very Good	Normal	Poor
2011	Jun 05	36	11	25	36%	36%	0	ND	ND	ND	9%	9%	0
2010	Jun 06	19	6	13	0	100%	0	ND	ND	ND	ND	ND	ND
	Jun 13	39	28	11	4%	50%	46%	0	72%	28%	ND	ND	ND
	Jun 20	26	23	3	9%	65%	26%	0	100%	0	0	96%	4%
	Jun 27	37	37	0	3%	73%	24%	3%	92%	5%	5%	81%	14%
	Jul 04	38	36	2	8%	69%	22%	14%	78%	8%	3%	69%	28%
	Jul 11	20	11	9	0	91%	0%	27%	64%	0	18%	55%	18%
2009	Jun 07	20	6	14	0	67%	33%	ND	ND	ND	ND	ND	ND
	Jun 14	43	38	5	29%	50%	21%	0	100%	0	0	100%	0
	Jun 21	44	44	0	41%	36%	23%	0	100%	0	0	86%	14%
	Jun 28	36	31	5	39%	55%	6%	3%	77%	9%	6%	71%	23%
	Jul 05	36	5	31	0	100%	0	0	100%	0	0	100%	0
	Jul 12	36	2	34	0	100%	0	0	100%	0	0	100%	0
2008	Jun 08	27	5	22	20%	60%	0	ND	ND	ND	ND	ND	ND
	Jun 16	34	17	17	0	76%	24%	0	100%	0	0	100%	0
	Jun 22	32	27	5	56%	44%	0	0	74%	26%	81%	19%	0
	Jun 29	33	27	6	52%	48%	0	15%	85%	0	56%	44%	0
	Jul 08	35	15	20	20%	80%	0	0	100%	0	47%	53%	0
	Jul 13	32	3	29	0	100%	0	33%	67%	0	0	100%	0
2007	Jun 03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Jun 12	39	28	11	0	29%	71%	ND	ND	ND	ND	ND	ND
	Jun 17	40	33	7	0	30%	70%	ND	ND	ND	ND	ND	ND
	Jun 24	44	40	4	0	35%	65%	ND	ND	ND	ND	ND	ND
	Jul 02	36	20	12	45%	45%	10%	80%	20%	0	0	40	60%
	Jul 08	33	10	23	60%	40%	0	80%	20%	0	30%	70%	0
	Jul 14	33	6	27	0	0	100	0	33%	67%	0	17%	83%
2006	Jun 03	22	0	22	0	0	0	ND	ND	ND	ND	ND	ND
	Jun 10	32	19	13	32%	68%	0	0	0	0	ND	ND	ND
	Jun 17	36	30	6	60%	40%	0	60%	40%	0	53%	47%	0
	Jun 25	48	43	5	79%	21%	0	91%	9%	0	19%	56%	26%
	Jul 02	46	14	32	21%	79%	0	71%	29%	0	43%	57%	0
	Jul 09	38	8	30	0	100%	0	25%	75%	0	37%	63%	0
	Jul 17	26	5	21	0	100%	0	100	0	0	0	100%	0

KNA Weekly Subsistence Fishing Report

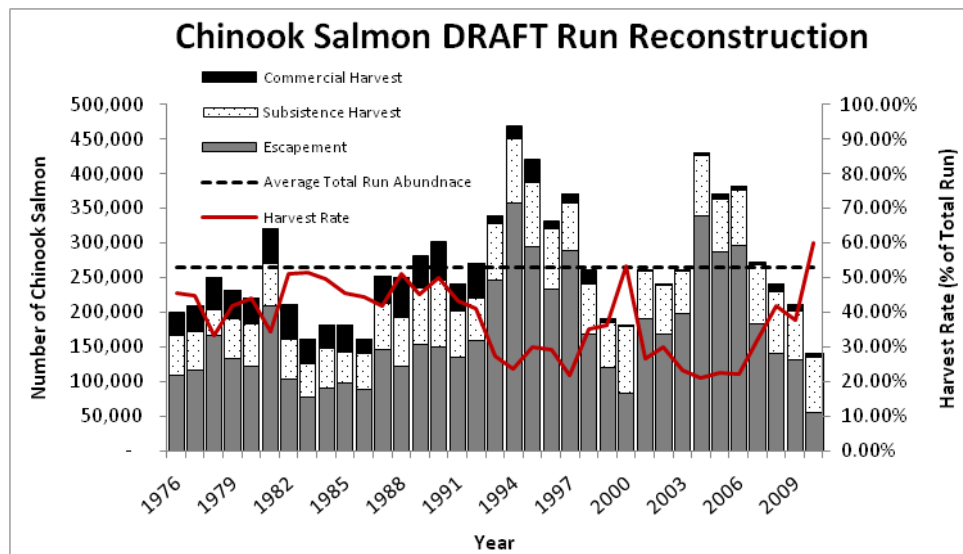
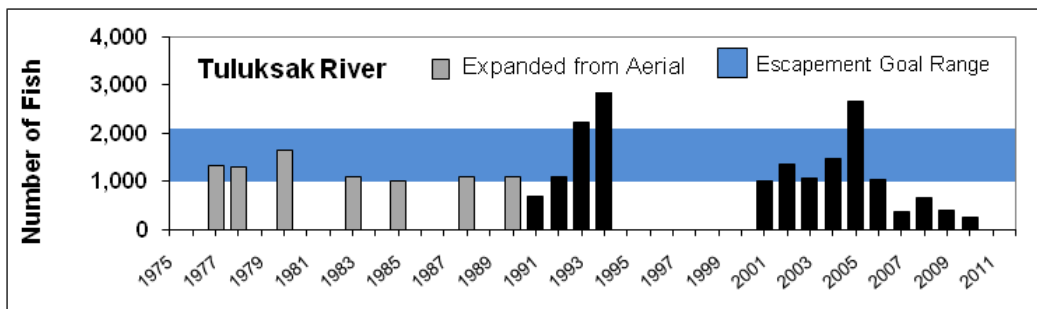
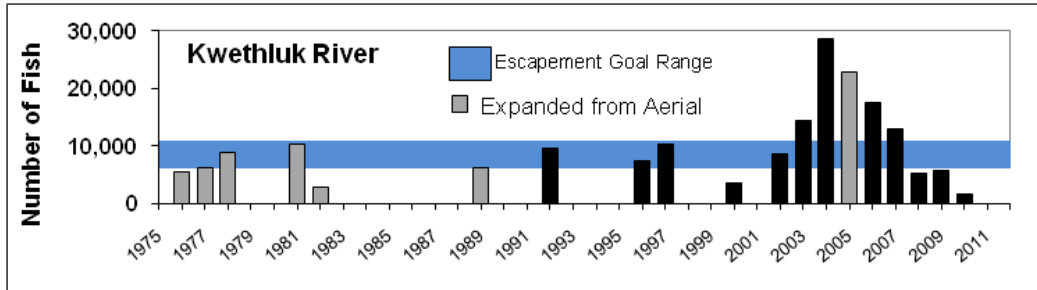
June 6-10, 2011

Village	Family	Fishing Y/N	Gear Type	Mesh Size	Species	How does the run compare to recent years? *NR = no response	Average # fish caught:	
Aniak	Family A	Yes	Drift & Set Net	6"				
					Sockeye	NR	0	
					Chinook	NR	1 drift/day	
					Coho	NR	0	
				Chum	NR	0		
	Family B	Yes	Drift Net	?				
					Sockeye	NR	0	
					Chinook	NR	0	
					Coho	NR	0	
				Chum	NR	0		
	Family C	Yes	Set Net	?				
					Sockeye	NR	0	
					Chinook	Below Average	5/day	
					Coho	NR	0	
				Chum	NR	0		
Stony River	Family D	Yes	Fish Wheel	?				
					Sockeye	NR	0	
					Chinook	NR	0	
					Coho	NR	0	
				Chum	NR	0		
	KNA Comments: Many participant families have not started fishing yet: Sleetmute (2 families contacted), Kalskag (3 families contacted), Chuathbaluk (3 families contacted), Crooked Creek (2 families contacted), and Aniak (2 families contacted). All of these families were contacted, but have not started fishing.							

ADF&G Overview of Kuskokwim River Salmon Run Assessment

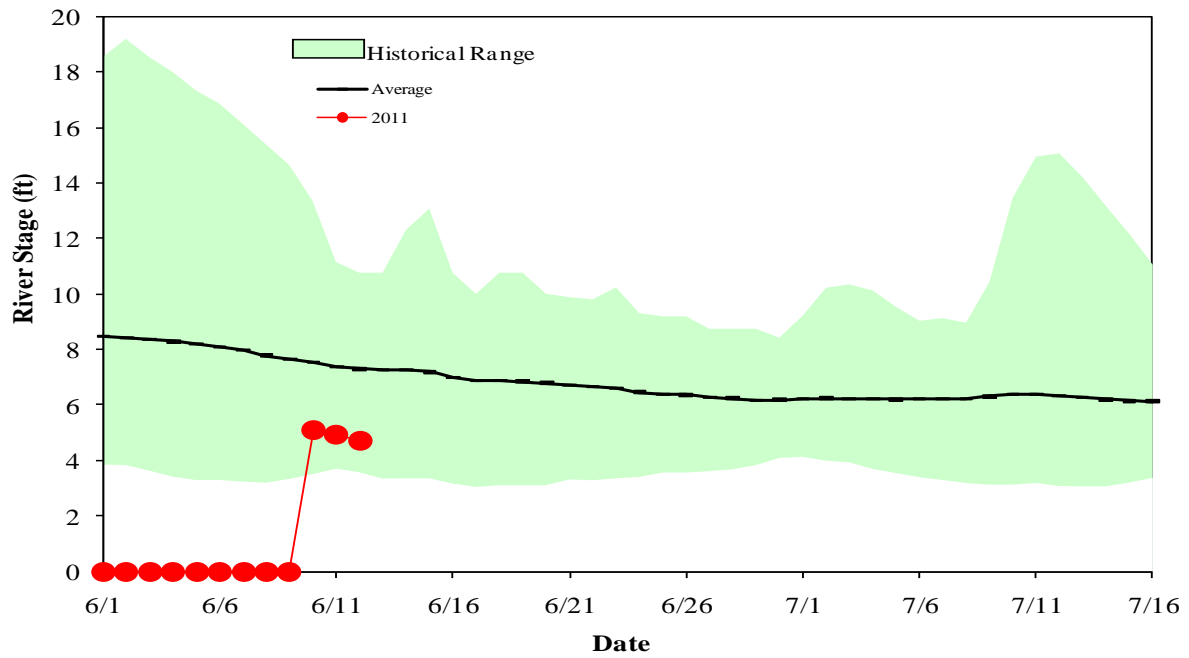
Some background information:

- Escapement at Kwethluk and Tuluksak were below the escapement goal for three and four years consecutively.
- Total 2010 Kuskokwim River Chinook salmon return was 142,796 with a spawning escapement of approximately 56,000 that was the lowest on record



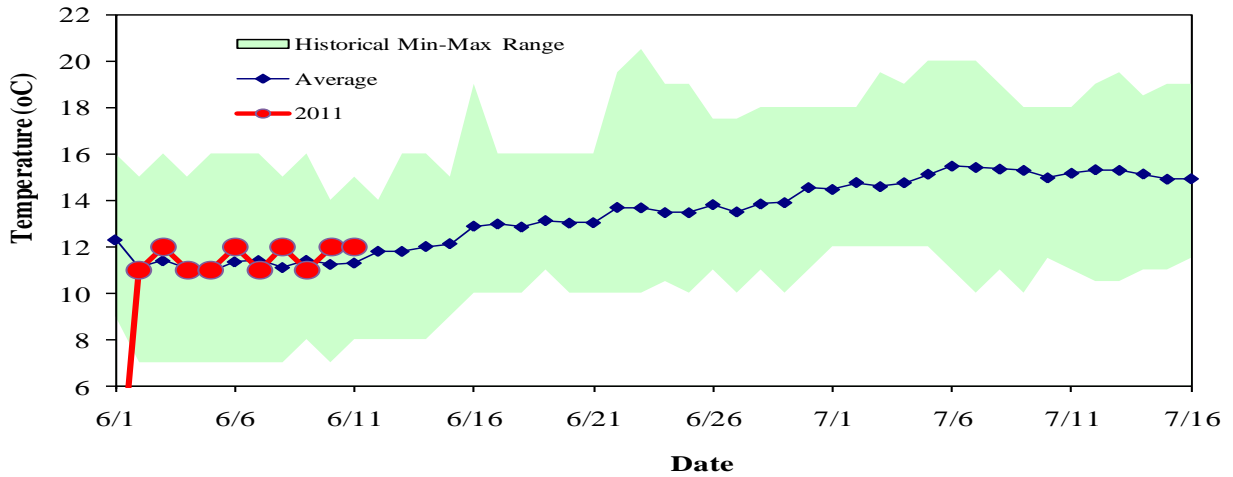


Historical Kuskokwim River Water Level at Crooked Creek (1984 to Present)

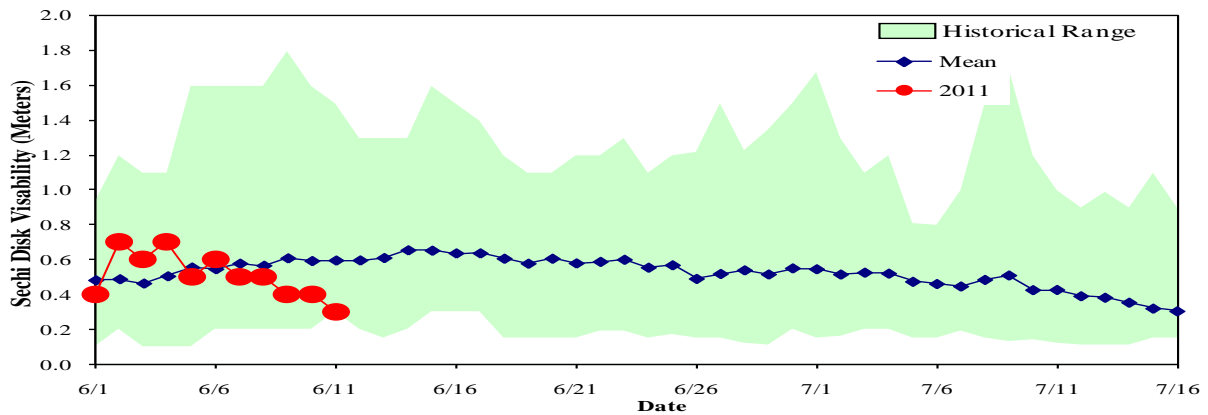


2011 Crooked Creek gauging station operational on June 10.

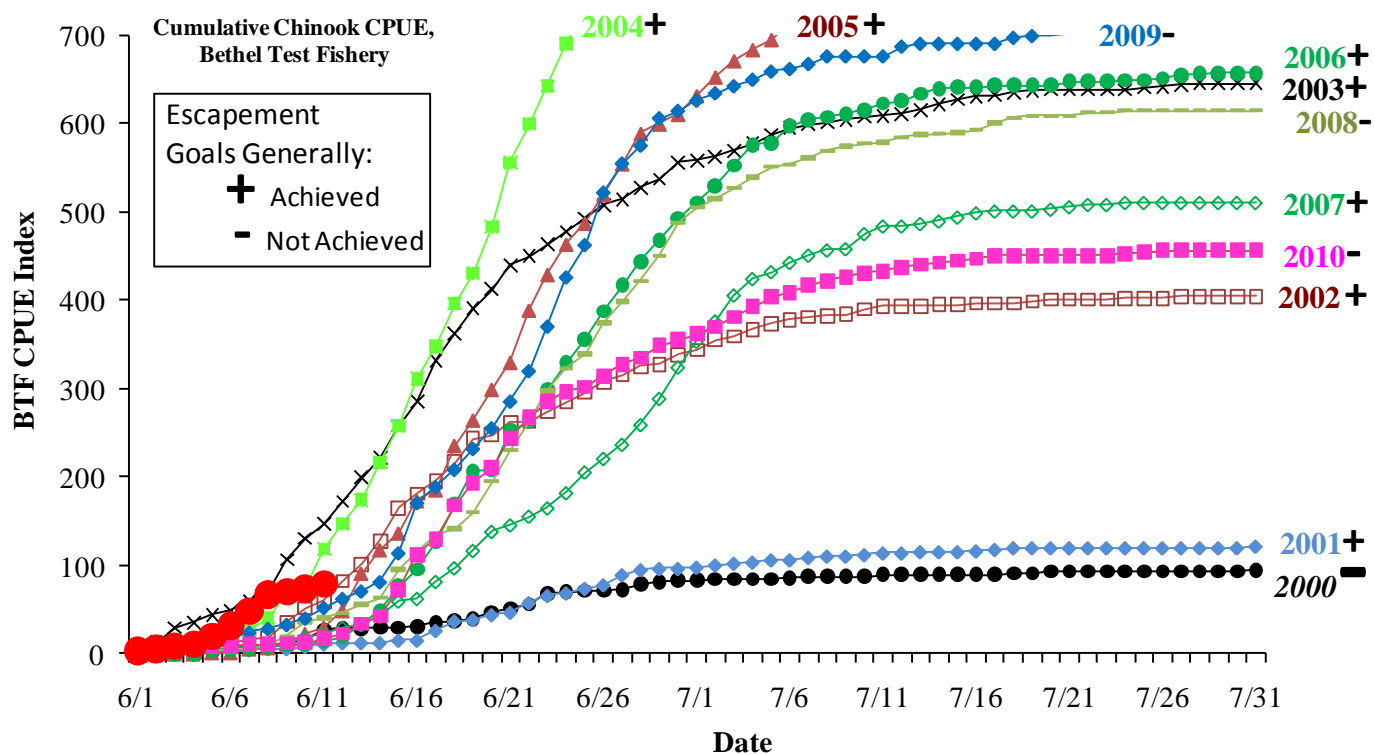
Historical Water Temperature at BTF Site (1984 to Present)



Historical Kuskokwim River Water Clarity at BTF (1984 to Present)



Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery



Chinook Salmon Cumulative CPUE Index

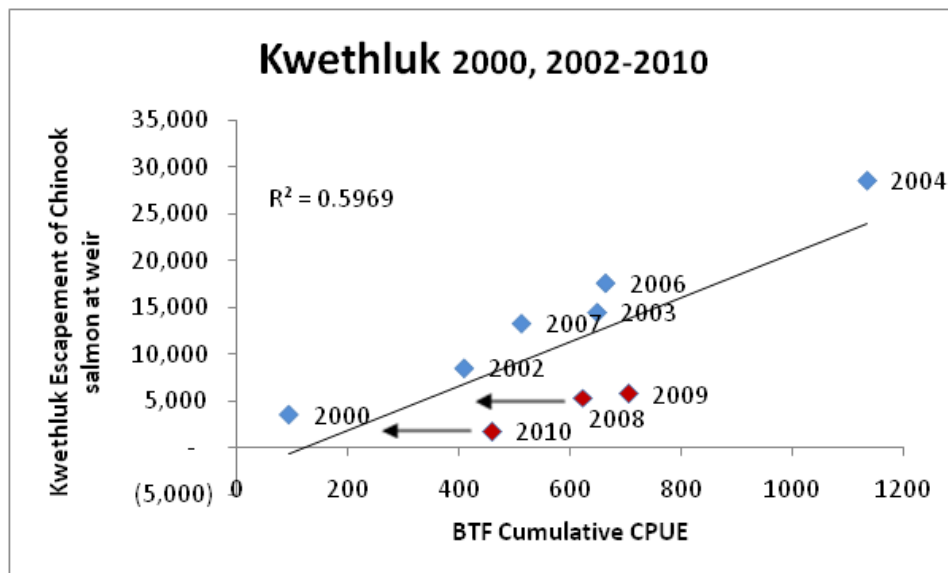
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
6/01	0	0	0	1	3		0	0	0	0	0	3
6/02	0	0	1	13	5		0	0	3	0	3	5
6/03	0	0	1	29	7	0	0	0	3	1	4	8
6/04	0	0	1	35	13	0	0	1	3	4	7	11
6/05	1	4	6	44	19	1	3	3	3	10	7	20
6/06	7	6	13	48	23	1	6	3	4	17	8	31
6/07	10	6	15	59	27	6	6	4	4	24	10	48
6/08	10	6	18	70	40	7	8	7	10	28	10	67
6/09	11	6	36	106	70	11	9	11	20	33	11	71
6/10	16	8	51	131	75	23	9	19	36	40	13	73
6/11	27	11	59	147	118	30	14	23	40	52	17	79
6/12	28	12	82	172	147	49	18	30	46	62	23	
6/13	28	12	101	199	174	91	33	33	56	71	34	
6/14	30	12	127	221	217	118	48	42	63	81	42	
6/15	30	15	165	258	258	137	77	60	96	114	73	
6/16	31	15	181	285	311	173	96	62	115	171	112	
6/17	35	26	196	332	347	186	126	82	135	189	130	
6/18	37	37	217	362	396	236	170	97	142	209	168	
6/19	40	38	243	390	430	265	207	117	160	232	193	
6/20	47	44	248	413	484	299	208	138	195	255	210	

Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery

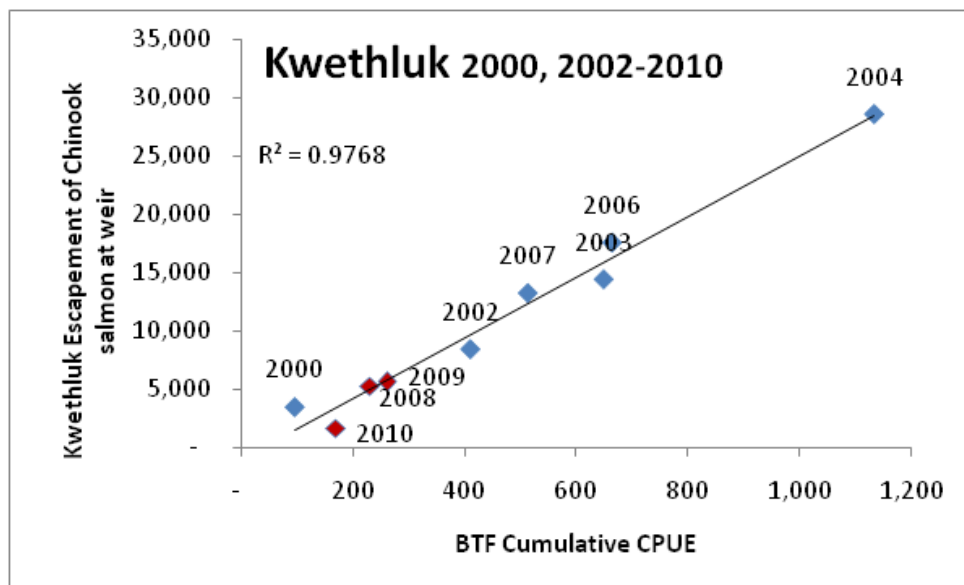
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
6/01		0	0	0	0	0	0	0	0	0	0	0
6/02		0	0	0	0	0	0	0	0	0	0	0
6/03		0	0	0	0	3	0	0	0	0	0	0
6/04		0	0	0	0	3	0	0	0	0	0	0
6/05	0	0	0	0	0	6	0	0	0	0	0	0
6/06	0	9	0	0	0	6	0	0	0	0	0	3
6/07	0	9	0	0	0	6	0	0	0	0	0	4
6/08	0	9	0	0	0	6	0	0	0	1	0	4
6/09	3	9	3	5	8	11	0	0	0	4	0	4
6/10	6	11	8	24	11	22	0	0	0	4	0	7
6/11	20	11	18	38	22	46	0	0	0	7	0	10
6/12	31	17	35	46	27	63	3	3	0	10	3	
6/13	37	23	61	54	38	96	3	17	3	13	6	
6/14	45	23	67	67	49	149	3	23	6	13	6	
6/15	48	26	92	97	77	154	11	31	34	16	21	
6/16	51	38	138	176	130	181	24	36	45	31	46	
6/17	57	100	158	279	145	236	42	50	48	34	65	
6/18	71	123	174	335	189	336	81	60	62	61	84	
6/19	91	152	196	446	212	444	136	74	87	86	142	
6/20	108	166	240	518	270	634	160	98	102	113	149	

Chum Salmon Cumulative CPUE Index, Bethel Test Fishery

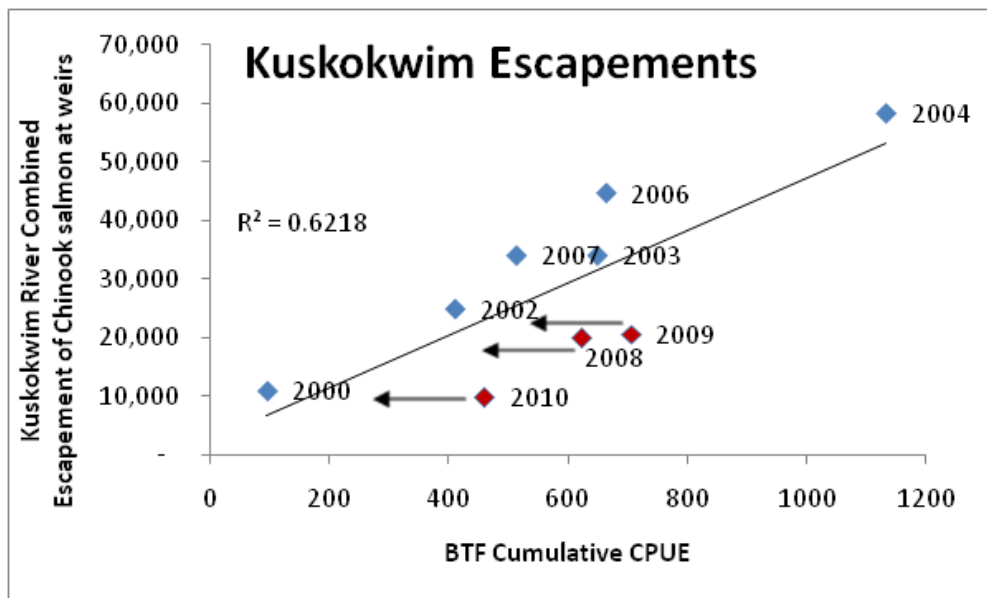
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
6/01		0	0	0	0	0	0	0	0	0	0	0
6/02		0	0	0	3	0	0	0	0	0	0	0
6/03		0	0	0	3	0	0	0	0	0	0	0
6/04		0	0	0	8	0	0	0	0	0	4	3
6/05	3	3	0	0	11	0	3	0	0	3	6	3
6/06	9	3	8	0	11	0	9	0	0	4	6	3
6/07	9	3	8	0	11	0	9	3	0	4	6	3
6/08	12	3	11	0	14	0	12	3	6	6	6	6
6/09	15	3	41	0	22	0	12	3	9	9	6	11
6/10	18	3	50	6	22	0	15	8	9	9	9	17
6/11	18	3	103	8	25	13	35	11	12	9	9	22
6/12	18	3	146	11	34	25	41	11	18	12	15	
6/13	18	9	180	17	71	38	133	23	18	14	26	
6/14	18	9	202	30	110	49	210	34	20	20	31	
6/15	18	9	285	49	144	87	266	57	41	42	50	
6/16	18	11	299	77	179	95	350	74	66	69	86	
6/17	20	17	338	103	229	131	499	94	80	75	133	
6/18	29	53	552	108	310	188	747	110	94	91	386	
6/19	43	67	665	148	371	252	927	138	106	99	542	
6/20	86	73	801	198	450	537	1012	258	161	105	588	



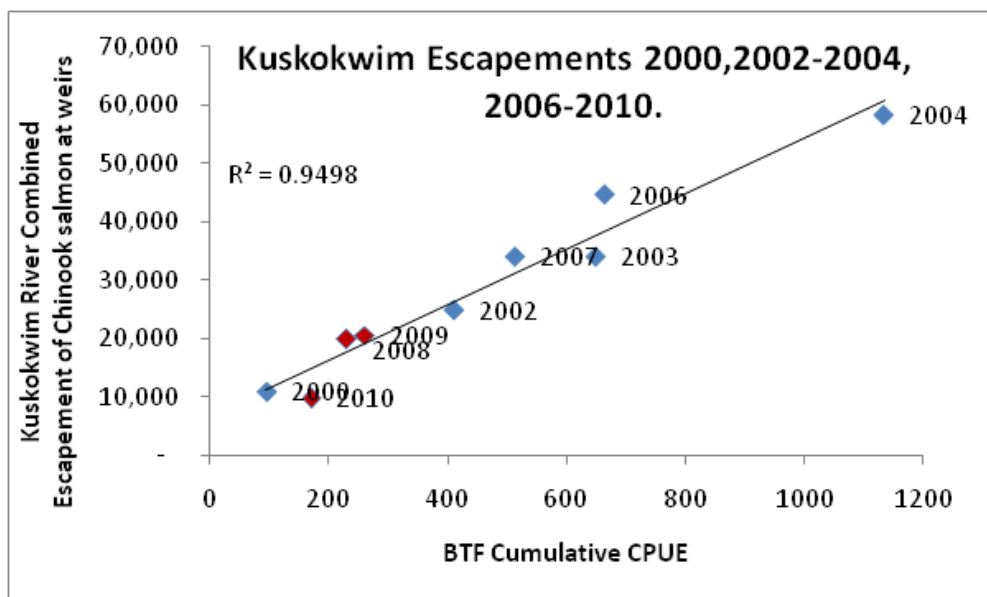
- 2008-2010 shows a shift in BTF catch efficiency, which we believe is due to changes in gillnet mesh and river morphology.
- To make 2008-2010 fit with the other years, a correction factor of 0.37 is applied to 2008-2010.
- We assume that the need for a correction factor will continue in 2011, however we will monitor both corrected and non-corrected values of BTF CPUE.



- There is a strong linear relationship between BTF CPUE and escapement at Kwethluk River weir.
- This means that we can use BTF to project the relative escapement at Kwethluk River weir.
- Does this same pattern hold true for the entire Kuskokwim River?

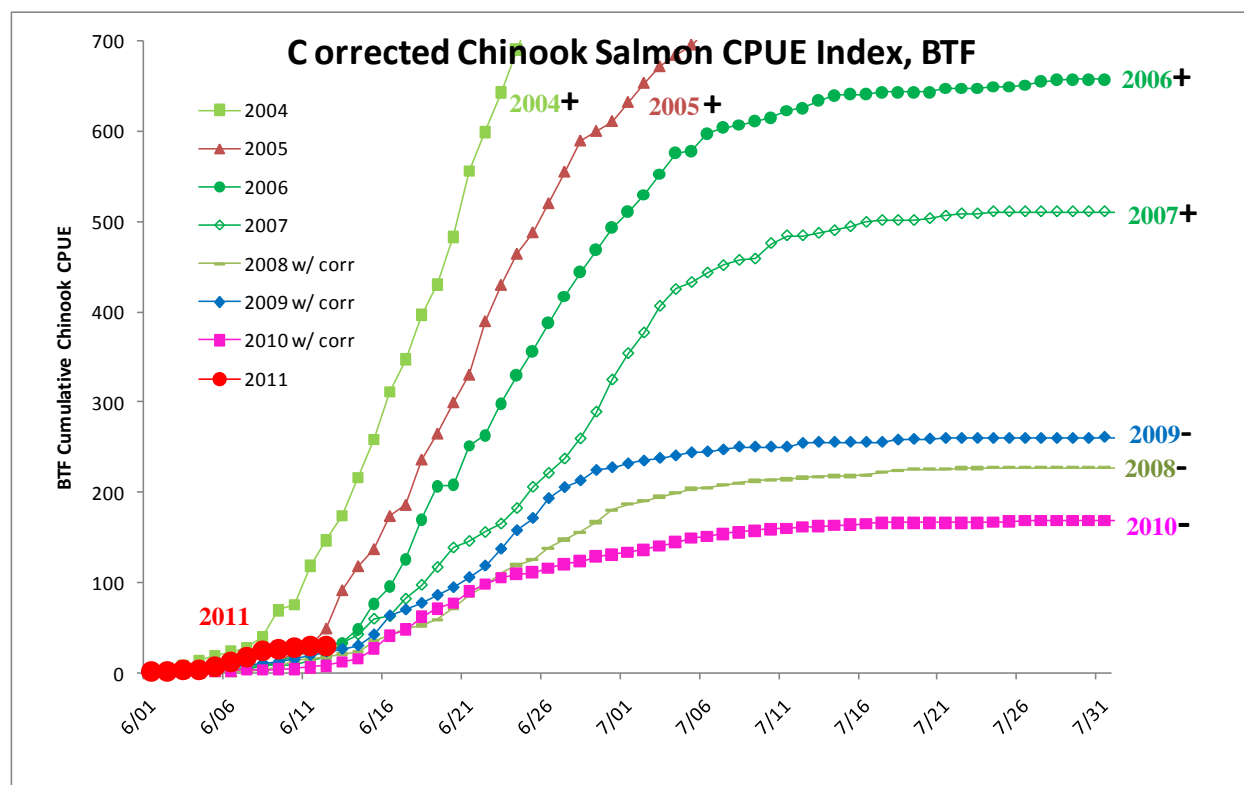


- Using only years where all weirs were operational (2000, 2002-2004, & 2006-2010) we see the same shift in BTF catch efficiency starting in 2008.



- Using the same correction factor of 0.37, 2008-2010 fit nicely within the strong linear relationship with BTF CPUE and Kuskokwim River monitored escapement.
- This means we can use BTF Cumulative CPUE to project relative Kuskokwim River escapement.

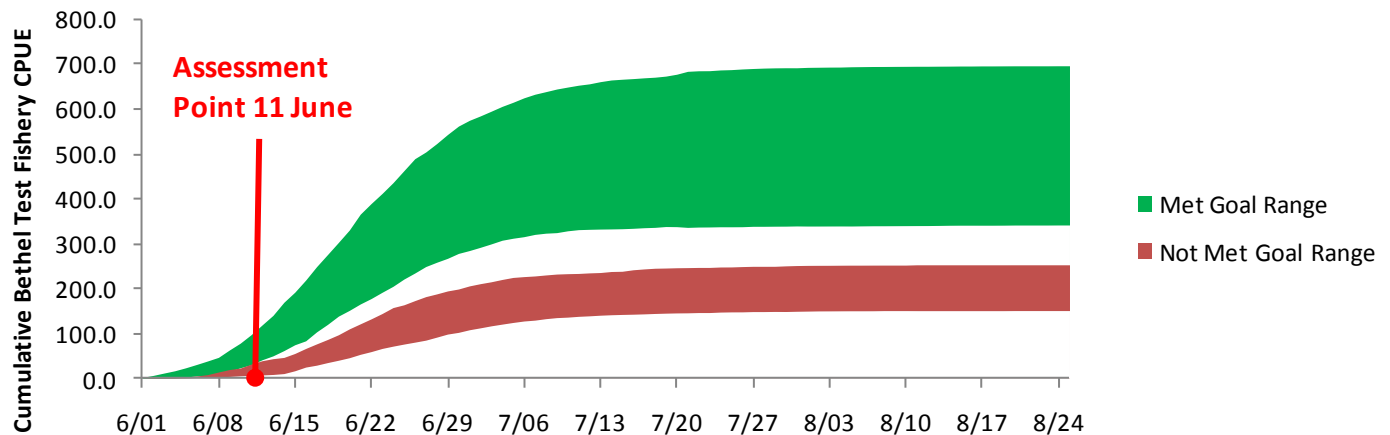
Corrected Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery



Corrected Chinook Salmon CPUE Index, BTF

Date	Uncorrected				Corrected (*0.37)			
	2004	2005	2006	2007	2008	2009	2010	2011
6/01	3		0	0	0	0	0	1
6/02	5		0	0	1	0	1	2
6/03	7	0	0	0	1	1	1	3
6/04	13	0	0	1	1	2	2	4
6/05	19	1	3	3	1	4	2	7
6/06	23	1	6	3	2	6	3	12
6/07	27	6	6	4	2	9	3	18
6/08	40	7	8	7	4	11	3	25
6/09	70	11	9	11	7	12	4	26
6/10	75	23	9	19	13	15	4	27
6/11	118	30	14	23	15	19	6	29
6/12	147	49	18	30	17	23	8	
6/13	174	91	33	33	21	26	12	
6/14	217	118	48	42	23	30	15	
6/15	258	137	77	60	35	42	27	
6/16	311	173	96	62	42	63	41	
6/17	347	186	126	82	50	70	48	
6/18	396	236	170	97	52	77	62	
6/19	430	265	207	117	59	86	71	
6/20	484	299	208	138	72	95	77	

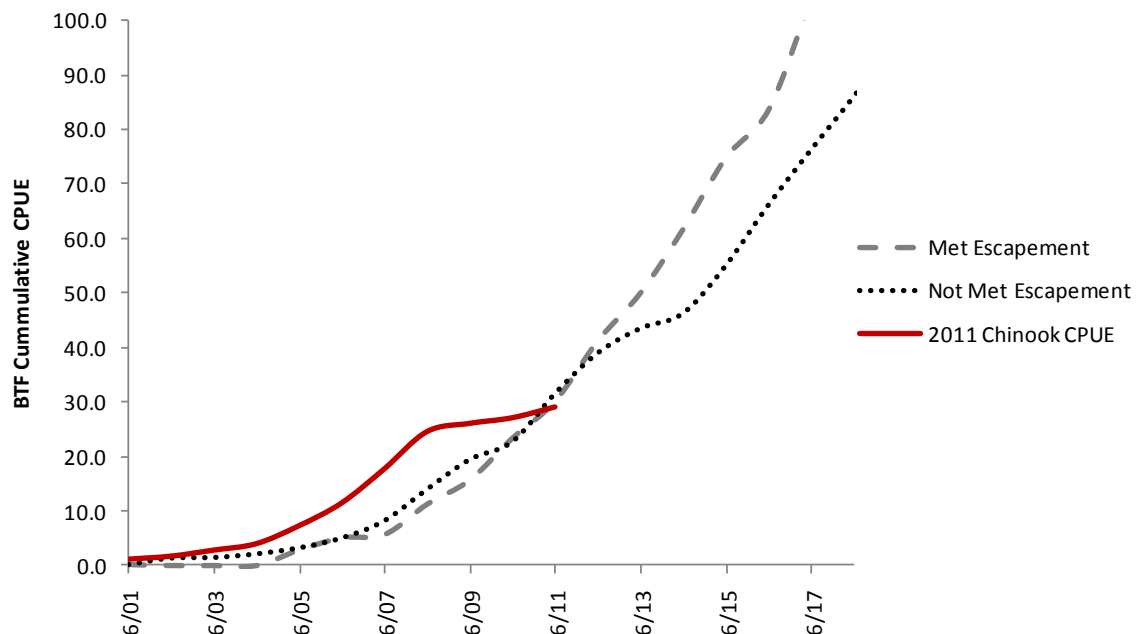
95 % Confidence interval range for meeting or not meeting escapement needs.



- This figure shows that the difference between achieving escapement needs and not meeting them becomes more evident after June 11.
- The "Met Goal" *lower* confidence interval is the value for staying the course of current actions.
- The "Not Met Goal" *upper* confidence interval is the value that will indicate the need for further action.

The new Bethel Test Fish graph that we will use this year

In season BTF Chinook CPUE compared to 95% "Meet" Lower CI and "Not Meet" Upper CI



- This figure only shows the lower CI line for meeting escapement (gray dashed), and the Upper CI line for not meeting escapement (black dotted), because they describe the trigger values.
- The solid line is 2011 BTF Chinook corrected CPUE.
- The value for further restrictions on June 11 = 31.4; June 12 = 38.9; June 13 = 43.4.
 - If inseason values are less than these values further restriction is warranted.

Salmon Conservation is KING



6049 © John Hyde ADF&G, Alaska Division of Tourism

2011 King salmon
run is expected
to be LOW

Think long term
sustainability:

Harvest
more abundant
CHUM, RED, COHO

**Take Less
KING SALMON**

Conserving Kings Preserves our Traditional Way of Life

Kuskokwim River Salmon Management Working Group

Salmon Conservation is KING

2011 King Salmon run is expected to be LOW

Conservation is what YOU can do...

All users of Salmon Resource think of
Long-term Sustainability

- Harvest more abundant
Chum, Red, and Silver salmon
Take Less King Salmon
- Preserve the King Salmon for
our Traditional Way of Life



Kuskokwim River Salmon Management Working Group